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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,256	03/22/2000	IGOR STEPANOVITCH NOSOV	P-001ERM	3604

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/509,256

Applicant(s)

NOSOV ET AL.

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3,4,6 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Response to Amendment

1. Applicant's amendment and accompanying Remarks filed 4-7-04 have been entered and carefully considered.

The amendment is sufficient to overcome the obviousness rejections of claims 1-6. However, an updated search yielded new prior art that provides a new basis of rejection as shown below. Applicant's arguments are rendered moot in view of the new grounds of rejection.

Additionally, the Examiner notes that in lieu of complying with 37 CFR 1.121, Applicant can petition the Office to suspend 37 CFR 1.121 as provided by 37 CFR 1.183 titled "Suspension of Rules".

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,247,182 to Servant et al.

With respect to claims 1 and 2, Servant et al teaches a flexible material comprising a fabric base and a lead-loaded elastomeric layer adhering to at least one surface of a fabric base. The layer has lead particles of a size smaller than 200 mesh (avg particle size of 100 microns) (Col 5, lines 41). Examiner notes that the elastomeric layer which functions as a support matrix for the lead particles solidifies in an environment that is not pressureless. Examiner notes that the disclosed particle size reads on a polydispersion since the term average as used by Servant et al clearly precludes the use of a monodispersion. With respect to claims 1 and 2, although Servant et al does not explicitly teach an article characterized by the relations:

$\mu m = (0.0-0.20)\mu m$ and $M = (0.05-0.5)m.$, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. X-ray absorbing filler within claimed size range as a poly-dispersed mixture a matrix containing X-ray absorbing filler, and an intermediate substrate) and in the similar production steps (i.e. mixing X-ray absorbing filler with matrix material and applying to intermediate substrate) used to produce the X-ray absorbing article. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed relations would obviously have been provided by the process disclosed by Servant et al. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the

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providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

In the alternative, Servant et al as set forth above fails to teach an article characterized by the relations:

$\rho_m = (0.0-0.20)\rho_p$ and $M = (0.05-0.5)m$. The claimed relations serve to define the density of the X-ray absorbing article as a whole as well as the total mass of the segregated, poly-dispersed mixture consisting of particles of X-ray absorbing filler. However, Servant et al recognizes that density of the resulting X-ray absorbing article greatly affects the flexibility of the resultant article (Col 11, lines 31-42). Therefore it would have been a simple matter of routine experimentation to determine the optimal density of the X-ray absorbing article as well as the total mass of the segregated, poly-dispersed mixture consisting of particles of X-ray absorbing filler that offers maximum flexibility and X-ray absorbing characteristics.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 3,4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,247,182 to Servant et al.

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With respect to claim 3,4 and 6, Servant et al teaches a flexible material comprising a fabric base and a lead-loaded elastomeric layer adhering to at least one surface of a fabric base. The layer has lead particles of a size smaller than 200 mesh (average particle size of 100 microns) (Col 5, lines 41). Examiner notes that the elastomeric layer which functions as a support matrix for the lead particles solidifies in an environment that is not pressureless. Examiner notes that the disclosed particle size reads on a polydispersion since the term average as used by Servant et al clearly precludes the use of a monodispersion.

Allowable Subject Matter


7. The following is a statement of reasons for the indication of allowable subject matter: With respects to claim 5, although Servant et al teaches the use of article as claimed except for utilizing mineral fiber as the intermediate substrate it would not have been obvious to have used mineral fiber since one of the stated functions of the fabric support disclosed by Servant et al is to provided abrasion resistance which mineral fibers do not provide as well as polymeric fibrous materials. Claim 5 is also objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may

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be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn Caldarola
Supervisory Patent Examiner
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